



## **Volumetric Dosers**



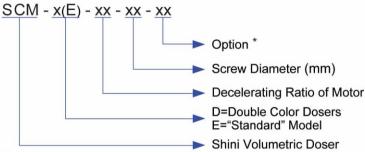
**SCM Single Color Doser** 





## SGM series

## **■** Coding Principle



Note: \*

MS=Equipped with Mixer (Only applicable for single color doser) CE=CE Conformity( Not applicable for "Standard" model)



SCM-D Double Color Dosers

#### Features

#### **Standard configuration**

- Dosing screws are chrome plated for durability.
- Unit is comprised of standard modules for ease of cleaning, disassembly and interchangeability.
- Three-tube hopper magnet is equipped at the base of single color doser to absorb metal impurities so to prevent screw of moulding machine from damage.
- Blender is a standard equipment for double color doser to make the material evenly mixed, while also a optional equipment for single color doser to do so.
- Main material hopper is a standard equipment for double color doser. It is optional for single color doser.
- External signals can be directly interfaced with control box.
- The current operation mode can be recorded, unaffected by power failure so operation would be returned to normal when power is on.
- Forced material cleaning is convenient to replace masterbatch.

#### **Features of SCM**

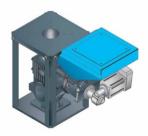
- Applicable on extrusion machines, just need to make a few wire replacements.
- Rotating speed can be automatically adjusted according to extruder processing speed, which maintains the fixed proportion of masterbatch.
- 50 units of parameter recipes are available for permanently recording the period of material discharging and finished products weight (for extruder, it is max. throughput per minute).
- Use brushless DC motor and free from maintenance.
- Both master blockage and overload can be detected, then machine will halt and sound alarm.
- Based on customers demand, some mold cycles can be set to add additives periodically so that micro-metering can be achieved.



SCM-E



SCM-4



Heavy Base(Option)



#### **Features of SCM-E**

- Motor rotating speed and plasticizing time can be adjusted simply and directly.
- High and low potential starts can be selected for IMM connecting signal
- Fixed 60-second output testing.
- Machine halts and sounds alarm when motor faults.
- Use carbon brush motor, the carbon can be replaced at fixed period.

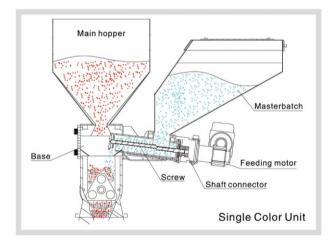
#### **Accessory option**

- For collocating with SHD-100 or SHD-160U and above dryers, heavy base should be selected.
- SCM-4 is capable of fulfilling the adding of four varieties of masterbatch at most.

## Application

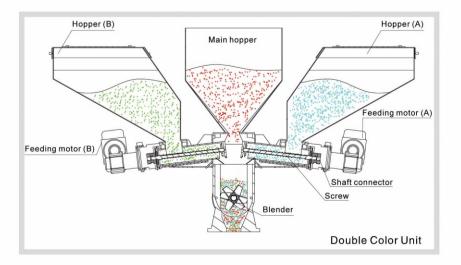
SCM series volumetric dosers are suitable for auto-proportional mixing of virgin materials, regrinds, master-batch or additives. A gear motor with gear ratio of 38: 1 or 75:1 is coupled to a dosing screw of 12, 14 or 16mm diameter to give a total of six models with output. ranging from 0.1~32kg/hr. Double color dosers can be assembled from two single color dosers if required. Five components automatic mixing can be realized if customers adopt four color dosers.

### Working Principle



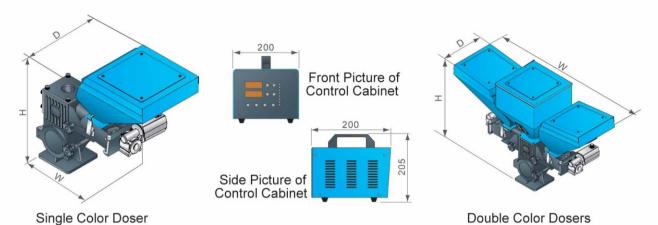
Signals from control cabinet will be sent to motor. Then it begins to work. The rotary force is transferred to the dosing screw through shaft connector. Color additives in hopper will fall into the groove of conveying screw, then be taken to hopper base by rotating action of the screw.

Signals from control cabinet will be sent to motor A/B. Then it begins to work. The rotary force is transferred to the dosing screw through shaft connector. Color additives in hopper A and B will fall into the groove of conveying screws, then be taken to hopper base by rotating action of the screws and to be mixed by mixing system before sending to moulding machine.



# 50M series

## Outline Drawings



## Specifications

Model	Single Color Unit						Double Color Unit		
	SCM-(E)-38-16	SCM-(E)-38-14	SCM-(E)-38-12	SCM-(E)-75-16	SCM-(E)-75-14	SCM-(E)-75-12	SCM-(E)-D-38/38	SCM-(E)-D-38/75	SCM-(E)-D-75/75
Motor Power (kW) (50/60Hz)	0.06	0.06	0.06	0.06	0.06	0.06	0.06 × 2	0.06 × 2	0.06 × 2
Output Power of Mixer (kW, 50 / 60Hz)	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Screw External Dia. (mm)	16	14	12	16	14	12	**	**	**
Output Capacity (kg/hr)	1.1~32	0.6~20	0.3~10	0.5~15	0.2~8	0.1~4	*	*	*
Storage Hopper (L)	10	10	10	10	10	10	10	10	10
Gear Ratio	38:1	38:1	38:1	75:1	75:1	75:1	38:1 / 38:1	38:1 / 75:1	75:1 / 75:1
Main Material Hopper (L)	Optional	Optional	Optional	Optional	Optional	Optional	Standard (15)	Standard (15)	Standard (15)
Mixer	Optional	Optional	Optional	Optional	Optional	Optional	Standard	Standard	Standard
Floor Stands	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Dimensions									
H (mm)	520	520	520	520	520	520	615	615	615
W (mm)	610	610	610	610	610	610	1045	1045	1045
D (mm)	335	335	335	335	335	335	335	335	335
Weight (kg)	29	29	29	29	29	29	50	50	50

Note: 1) "\*" stands for the output capacity depends on model selected, data of the single color doser can be a reference. For example: SCM-D-38-16 / 38-14, output capacity 1.7~52kg/hr.

- 2) "\*\*" stands for external dia. of screw is up to model selected.
- For additionally mount mixer on single color doser, add "MS" at model behind.
- 4) All output capacities from above models are base on data from bulk density 1.2kg/L, dia. 2~3mm masterbatch in a test criteria of continuous running.
- 5) Main power for single color unit is  $1\Phi$ , 115 / 230V, 50 / 60Hz, but it will be  $3\Phi$ , 230 / 400 / 460 / 575VAC, 50 / 60Hz when equipped the mixer.

We reserve the right to change specifications without prior notice.





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